

Name of the Student: _____

Max. Marks : 11 Marks

Time : 11 Minutes

Mark Schemes

Q1.

Question Number	Answer	Additional guidance	Mark
	D		(1)

Q2.

Question Number	Answer	Additional guidance	Mark
	B	$(\lambda / 2)$	(1)

Q3.

Question Number	Answers	Additional Guidance	Mark
	C	180° clockwise, 90° anticlockwise	(1)

Q4.

Question Number	Answer	Additional guidance	Mark
	C	(polarisation)	(1)

Q5.

Question Number	Answers	Additional Guidance	Mark
	D	$\sin 61^\circ / \sin 42^\circ$	(1)

Q6.

Question Number	Answers	Additional Guidance	Mark
	D	particles undergo no disturbance at an antinode	(1)

Q7.

Question Number	Answers	Additional Guidance	Mark
	A	diffraction	(1)

Q8.

Question Number	Answer	Additional guidance	Mark
	B	$\left(\frac{v_2}{f}\right)$	(1)

Q9.

Question Number	Acceptable answers	Additional guidance	Mark
	The only correct answer is C because the maximum order reached corresponds to the highest integer value less than or equal to line spacing divided by wavelength, which is 4, and there are that many orders either side of the maximum plus a central order A is not correct because the maximum order reached corresponds to the highest integer value less than or equal to line spacing divided by wavelength, which is 4, and there are that many orders either side of the maximum plus a central order, but this answer only gives the number of orders on one side of the central order B is not correct because the maximum order reached corresponds to the highest integer value less than or equal to line spacing divided by wavelength, which is 4, but this order rounds 4.7 to 5 and doesn't consider the central maximum or that there are orders on either side D is not correct because the maximum order reached corresponds to the highest integer value less than or equal to line spacing divided by wavelength, which is 4, but this order rounds 4.7 to 5 and then adds the orders on the other side and the central maximum		1

Q10.

Question Number	Acceptable answers	Additional guidance	Mark
	The only correct answer is B A is not correct as the corresponding maxima must be V or Z and only V is represented by the answer option B C is not correct as the corresponding maxima must be V or Z and only V is represented by the answer option B D is not correct as the corresponding maxima must be V or Z and only V is represented by the answer option B		1

Q11.

Question Number	Answer	Mark
	D visible line spectra	1
	Incorrect Answers: A – wave model B – wave model C – wave model	